CA/EM (Q12L13) 25% (5/20)

✓ 1. Which of these algorithms can be used to fill the missing values

- A KNN for regression
- B KNN for classification
- C both
- D I do not know

✗ 2. Bagging is a technique used to reduce

- A the variance of our predictions
- B the bias of our predictions
- C both
- D I do not know

✗ 3. How can Ensemble methods be constructed?

- A By manipulating the training set
- B By manipulating the input features
- C By manipulating the class labels
- D By manipulating the learning algorithm
- E All of them
- F None
- G I do not know

✗ 4. Repeatedly sampling observations are taken

- A from general population
- B original sample data set
- C I do not know
- D None

✓ 5. Random Forest differs from bagging

- (A) by a random sample of m predictors
- (B) by bootstrapped training samples
- (C) by adaptive sampling
- (D) I do not know

✗ 6. Boosting differs from bagging

- (A) by a random sample of m predictors
- (B) by bootstrapped training samples
- (C) by adaptive sampling
- (D) I do not know

✗ 7. Averaging many highly correlated quantities

- (A) lead to as large of a reduction in variance
- (B) does not lead to as large of a reduction in variance
- (C) lead to as large of a reduction in bias
- (D) I do not know

✓ 8. We can perform a Random forest in R using the function

- (A) randomForest()
- (B) rf()
- (C) randomF()
- (D) boot()
- (E) I do not know

✓ 9. Random Forest works

- (A) for classification
- (B) for regression
- (C) both
- (D) I do not know

✓ 10. Cluster Analysis is

- (A) Unsupervised learning technique
- (B) Supervised learning technique
- (C) I do not know

✗ 11. Distance between records and distance between clusters are the same

(A) True
(B) False
(C) I do not know

✗ 12. Which of these is the measure of between clusters distance?

(A) Single link
(B) Complete link
(C) Average link
(D) Centroid
(E) All of them
(F) I do not know

✗ 13. Single link is

(A) the smallest distance between an element in one cluster and an element in the other
(B) the largest distance between an element in one cluster and an element in the other
(C) the average distance between an element in one cluster and an element in the other
(D) distance between the centroids of two clusters
(E) I do not know

✗ 14. Complete link is

(A) the smallest distance between an element in one cluster and an element in the other
(B) the largest distance between an element in one cluster and an element in the other
(C) the average distance between an element in one cluster and an element in the other
(D) distance between the centroids of two clusters
(E) I do not know

✗ 15. Which of these is the nested algorithm of clustering?

(A) Hierarchical clustering
(B) k-means
(C) Knn
(D) I do not know

✗ 16. Which of these is the unnested algorithm of clustering?

A Hierarchical clustering

B k-means

C Knn

D I do not know

✗ 17. Which of these is the type of hierarchical clustering?

A Agglomerative Methods

B Divisive Methods

C Both

D I do not know

✗ 18. This function can be used to perform hierarchical clustering in R

A hclust()

B cluster()

C hierarchical ()

D I do not know

✗ 19. This function can be used to perform k-means clustering in R

A kmeans()

B kclust()

C kmenscl()

D I do not know

✗ 20. Do we need to worry about scaling in clustering?

A Yes

B No

C I do not know